



## Scientific Workforce Analysis and Modeling Executive Committee

January 13, 2011

GWU Biostatistics Center  
6110 Executive Boulevard #750  
Rockville, MD

# MINUTES

**Next Meeting: February 23, 1-3 pm by teleconference**

1-888-405-2185, passcode 319230

### Decisions:

- For the time being, executive committee meetings will be open to researchers from all the research groups.
- The research agenda will be Dynamics of Postdoctoral Training and will take advantage of a variety of modeling methodologies and research questions.
- We will change the program name from “Modeling the Scientific Workforce” to “Scientific Workforce Analysis and Modeling (SWAM)”
- Research groups are invited to attend the 4<sup>th</sup> Understanding Interventions Conference to be held in Nashville from May 26-28, 2011.

### Summary of meetings with experts and steering committee

Researchers found the meeting with experts to be quite helpful in understand key issues and dynamics related to improving diversity in the scientific workforce. Six key issues emerged as possible foci for a modeling effort.

- Postdoctoral dynamics
- Doubling of the NIH budget
- Mandatory retirement ages
- Immigration of skilled talent
- Mentoring
- Community and for-profit colleges

After discussion, the executive committee agreed to focus on postdoctoral dynamics. Several reasons drove this decision.

- Postdoctoral data are reasonably available, though there are certainly issues about what faculty/staff/trainee categories are considered to be postdoctoral fellows.
- Postdoctoral training is a “gatekeeping” step to professional positions in most areas of biological sciences (biostatistics and bioinformatics are two exceptions).

- Postdoctoral dynamics will drive the development of modeling using several approaches such as queueing theory, agent based modeling, decision analysis, and dynamical modeling.

It will be possible to address several specific issues, such as whether postdoctoral fellows serve as a buffering pool between graduate school and faculty positions, implications of rates of movement of people into and out of the postdoctoral pool, long-term effects of elimination of retirement ages on faculty positions and postdoctoral dynamics, implications for contract faculty positions, effects of variation in university practices, and effects of funding cycles and practices on postdoctoral training.

Both research groups will collaborate on this project, including acquisition and sharing of data, modeling methods and results, and insights as they emerge. The research groups will update NIGMS staff on a videoconference on February 23.

### Other Items

Shiva Singh invited the SWAM groups to engage with interventions researchers. NIGMS supports a specific program, and there are other groups as well.

- A brief description of the NIGMS program, including a link to current PIs, and their project titles can be accessed at: <http://www.nigms.nih.gov/Minority/Interventions.htm>
- The **4<sup>th</sup> Understanding Interventions Conference will be held in Nashville from May 26-28, 2011.**
- Three previous Understanding Interventions conference reports can be found at: <http://www.understandinginterventions.org/>
- A pdf of the Research on Interventions annual progress report (“White Paper”) that came out of 2009 annual progress report meeting has been distributed by email;
- This year’s NIGMS Research on Interventions annual progress report meeting is expected to be held either in San Francisco or San Diego in August. Although it is a closed meeting, NIGMS will extend the invitation to the modeling principals.

The MIDAS meeting focuses on development of models for infectious disease dynamics, some of which are relevant to SWAM. Research groups are invited to attend the MIDAS meeting in Atlanta on May 6-8. Details are forthcoming.